

Learning to Live • Loving to Learn



PATRICK HENRY ELEMENTARY WALKABOUT: Existing Conditions, Findings and Recommendations

June 2017

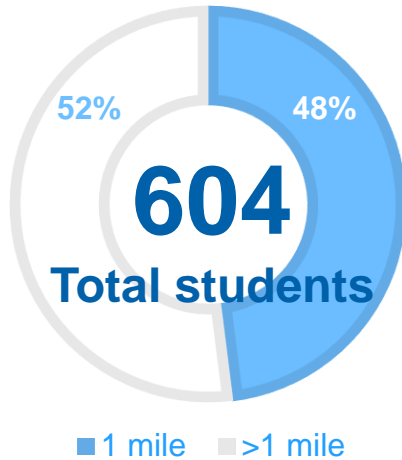
PATRICK HENRY ELEMENTARY WALKABOUT DETAILS

- **Date:** April 5, 2017
- **Observation:** Arrival
- **Participants:**
 - Toole Design Group staff
 - City of Alexandria Transportation Planning staff
 - Alexandria Bicycle & Pedestrian Advisory Committee members
 - Patrick Henry Elementary neighbors
- **Purpose:**
 - Observe school arrival process
 - Evaluate school-zone infrastructure
 - Assess existing Safe Routes to School programming

OVERVIEW OF PATRICK HENRY ELEMENTARY SCHOOL

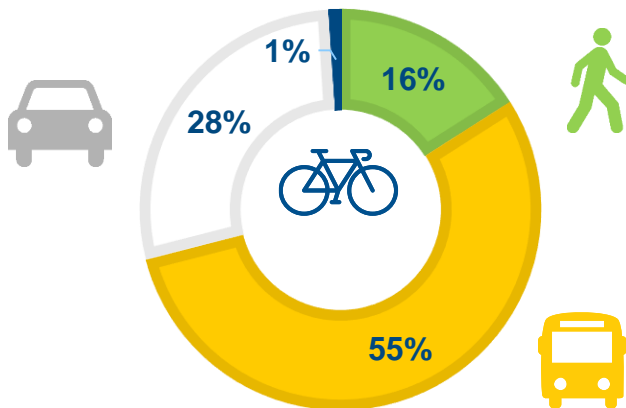
STUDENT DISTANCE FROM SCHOOL

As reported in 2014 Parent Survey



STUDENT TRAVEL MODES

Average of "to school" and "from school" modes as reported in 2014 Parent Survey



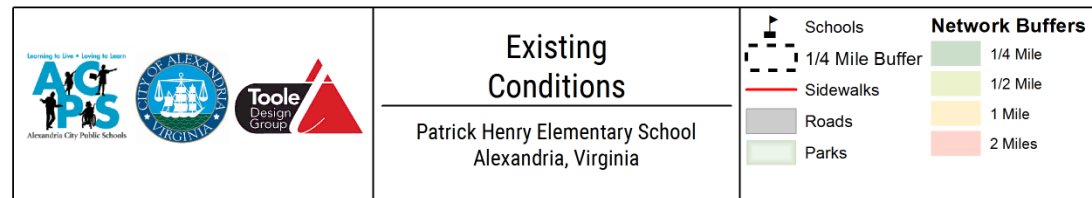
	<p>Overview Map</p> <p>Patrick Henry Elementary School Alexandria, Virginia</p>	<p> Schools</p> <p> 1/4 Mile Buffer</p> <p> Parks</p> <p> Roads</p>
--	--	---

STUDENT DISTANCE FROM SCHOOL DETAIL

Distance	Percentage of Students
¼ mile	11%
½ mile	15%
1 mile	21%
2 miles	32%
>2 miles	20%

As reported in 2014 Parent Survey

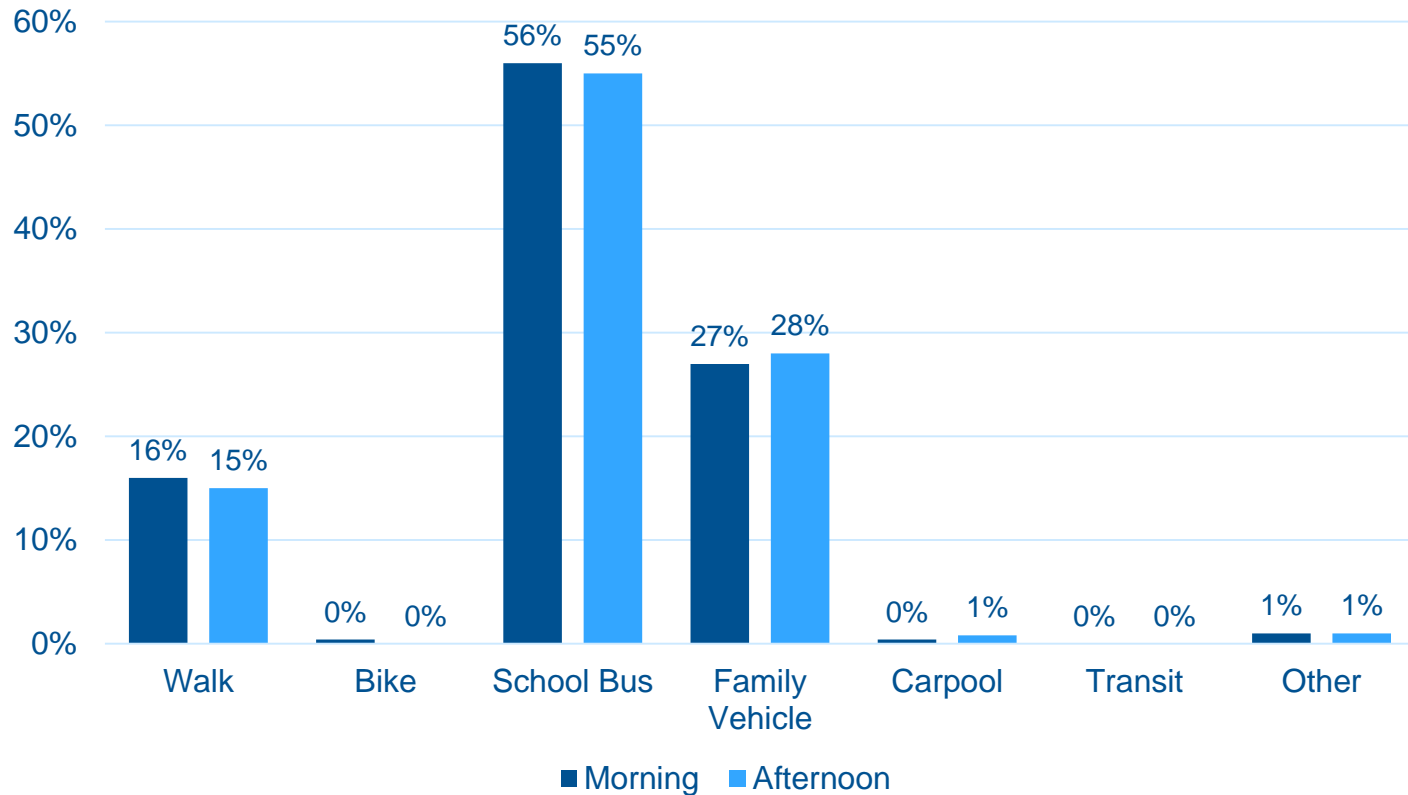
The hollow circle on the map represents a ¼ mile direct distance buffer from the school. The colored polygons show the distance along the road network.



EXISTING CONDITIONS

TRAVEL PATTERNS

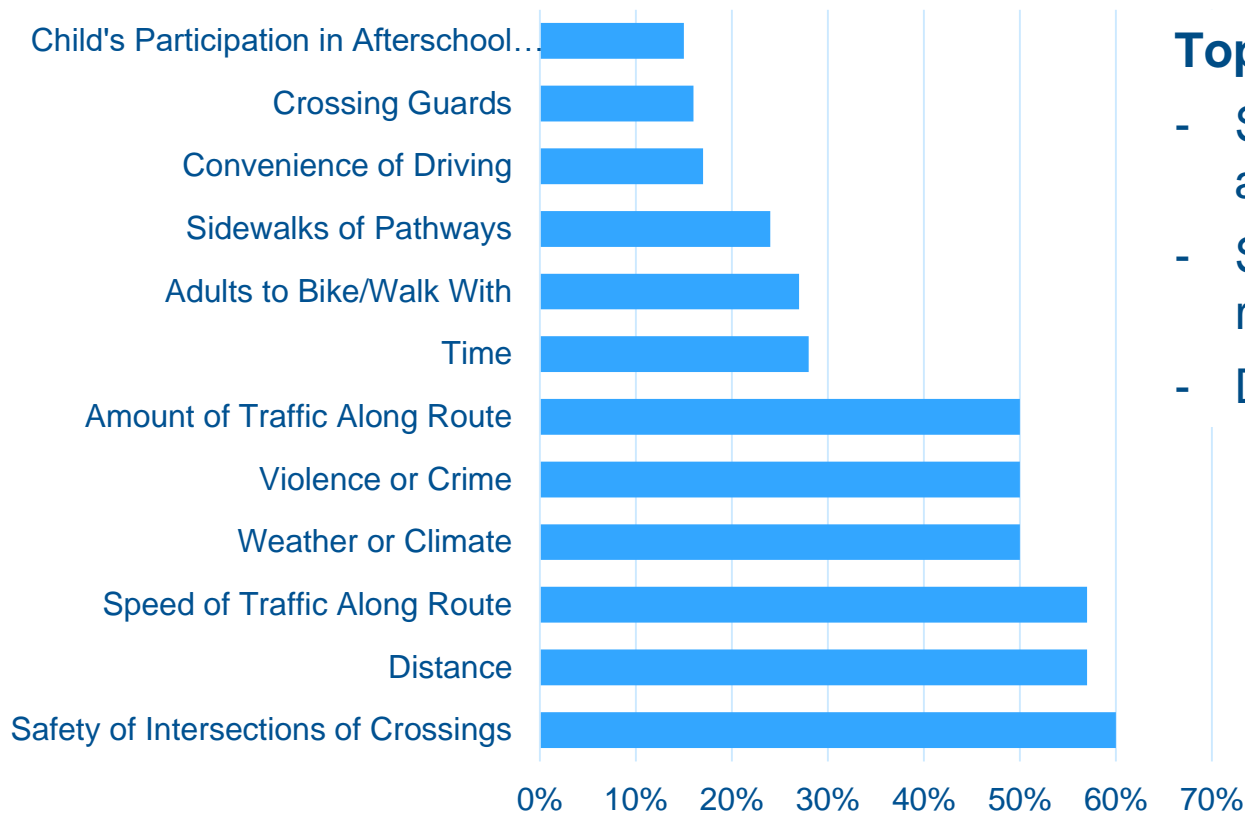
Morning and Afternoon Travel Mode Comparison



Fall 2014 Student Travel Tallies

TRAVEL PATTERNS (cont.)

Issues reported to affect the decision to not allow a child to walk or bike to/from school by parents of children who do not walk or bike to/from school



Top 3 issues:

- Safety of intersections and crossings (60%)
- Speed of traffic along route (57%)
- Distance (57%)

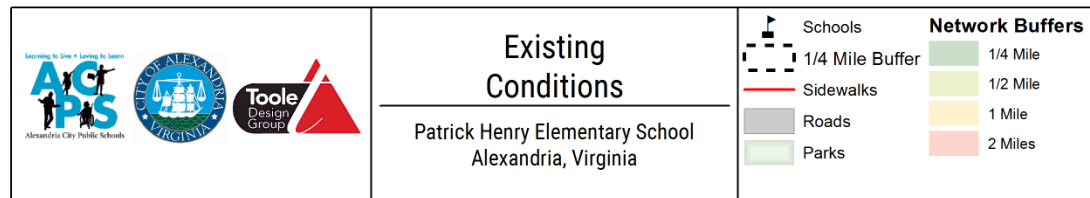
Fall 2014 Parent Survey

PEDESTRIAN NETWORK

Sidewalks – Most sidewalks are at least 4 feet wide and include a buffer from the roadway

Crosswalks – The three intersections closest to the school have marked crosswalks on all four legs

Curb ramps – Curb ramps are present at most intersections but not all meet ADA standards regarding slope and detectable warning surfaces















BICYCLING NETWORK

Taney Ave – East-west connection with bike lanes and relatively high motor vehicle traffic volumes in front of the school

N Jordan St – North-south connection with on street parking and relatively high traffic volumes

The rental agreements at some of the nearby apartment complexes prohibit students from owning bikes, which limits the number of students biking to school.

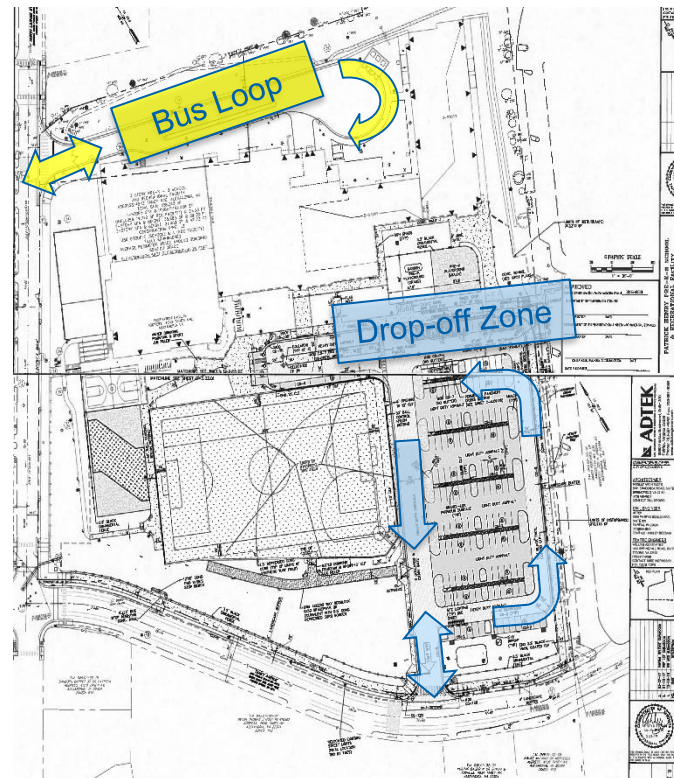


<div><div><div>Learning to Live • Living to Learn</div><div><div>Alexandria City Public Schools</div></div></div><div></div><div><div></div><div></div></div></div>	<div><div><div>Bicycling Infrastructure</div><div>Patrick Henry Elementary School Alexandria, Virginia</div></div></div>	<div><div><div>Existing Facilities</div><div><div> Trail</div><div> Advisory Bike Lane; Bike lane</div><div> Climbing Lane</div><div> Shared Lane Markings</div><div> Unpaved Nature Trail</div></div></div><div><div><div>Proposed Facilities</div><div><div> Trail</div><div> Shared Roadway</div><div> Enhanced Bicycle Corridor</div></div></div></div></div>
--	--	---

ARRIVAL OBSERVATIONS

New Patrick Henry Construction Project

- With construction of a new school building and community center slated to begin in summer 2017, arrival observations focused on the three intersections closest to the school.
- The existing (left) and planned (right) arrival patterns are included below for comparison.



ARRIVAL OBSERVATIONS

Latham Street and Taney Avenue

- This intersection is controlled by a 4-way stop.
- The effective curb radii at this intersection are wide due to the presence of on-street parking and bike lanes on Taney Avenue.
- Drivers were observed using the westbound bike lane on Taney Ave to make right turns onto Latham Street.
- There is a flashing school zone sign for eastbound traffic located to the east of this intersection, approximately 520-feet from the school's front entrance. This sign was not flashing during arrival observation.



ARRIVAL OBSERVATIONS

Howard Street and Taney Avenue

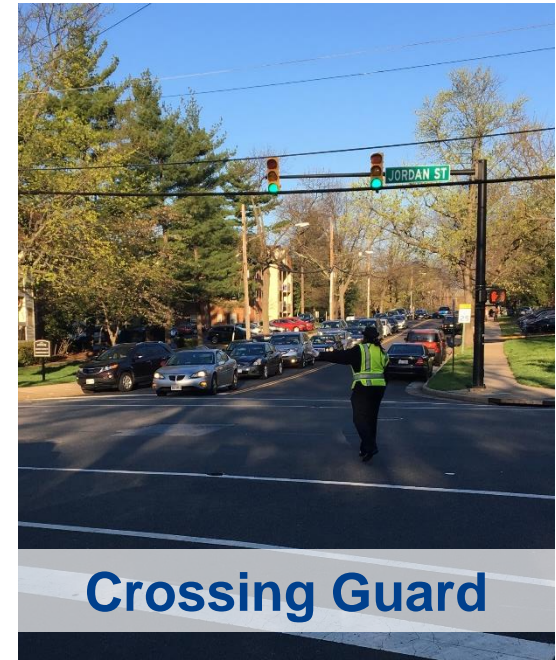
- Traffic on Howard Street is stop controlled, but traffic on Taney Avenue does not stop at this intersection.
- Most of the students walking to school pass through this intersection.
- There are well-utilized middle school and WMATA bus stops located close to this intersection that generate substantial pedestrian activity during arrival.
- Many northbound drivers use Howard St as an alternative to Jordan St, turning left onto Taney Avenue at this intersection.
- There is a flashing school zone sign for westbound traffic located to the west of this intersection, approximated 340-feet from the school's front entrance.



ARRIVAL OBSERVATIONS

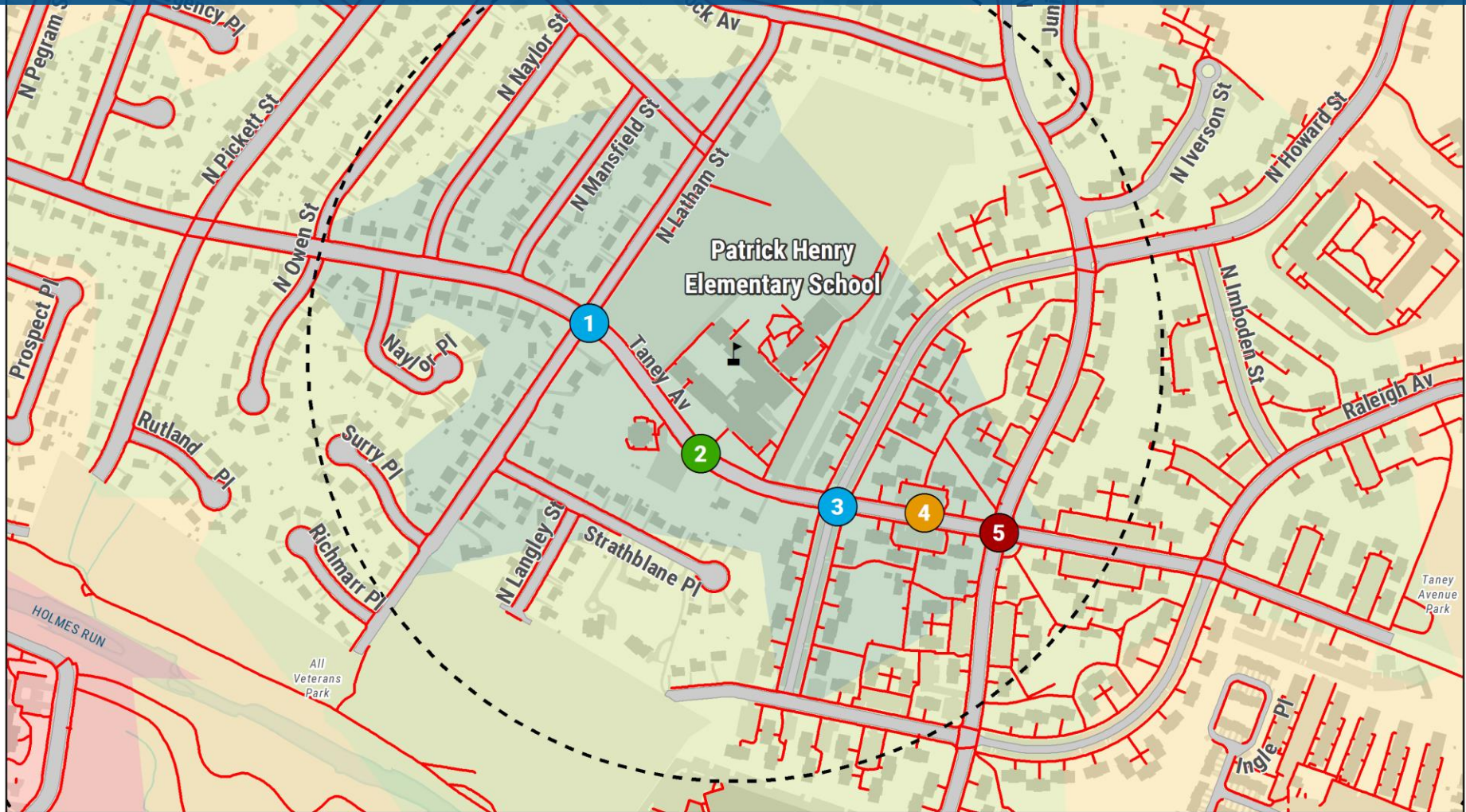
Jordan Street and Taney Avenue

- This intersection has a traffic signal and a crossing guard posted during arrival and dismissal.
- The crossing guard stops turning traffic while students are in the crosswalk.
- Although there are “No Turn on Red while Crossing Guard is Present” signs posted on the nearside of the intersection in both directions on Taney Avenue, drivers were observed making right turns on red.
- Large curb radii at this intersection accommodate high speed turning movements and increase the crossing distance for pedestrians.
- Cars were parked very close to the corners of this intersection, blocking views of the pedestrians approaching the intersection.



ENGINEERING RECOMMENDATIONS

INFRASTRUCTURE RECOMMENDATIONS MAP



Infrastructure Recommendations

Patrick Henry Elementary School
Alexandria, Virginia

- Intersection Recommendations
- Mid-Block Recommendations
- School Zone Signage Recommendations
- Signalized Intersection Recommendations
- Sidewalk Recommendations
- Sidewalks

- Schools
- 1/4 Mile Buffer
- Network Buffers**
- 1/4 Mile
 - 1/2 Mile
 - 1 Mile
 - 2 Miles

GENERAL RECOMMENDATIONS WITHIN ½ MILE OF SCHOOL



Recommendations

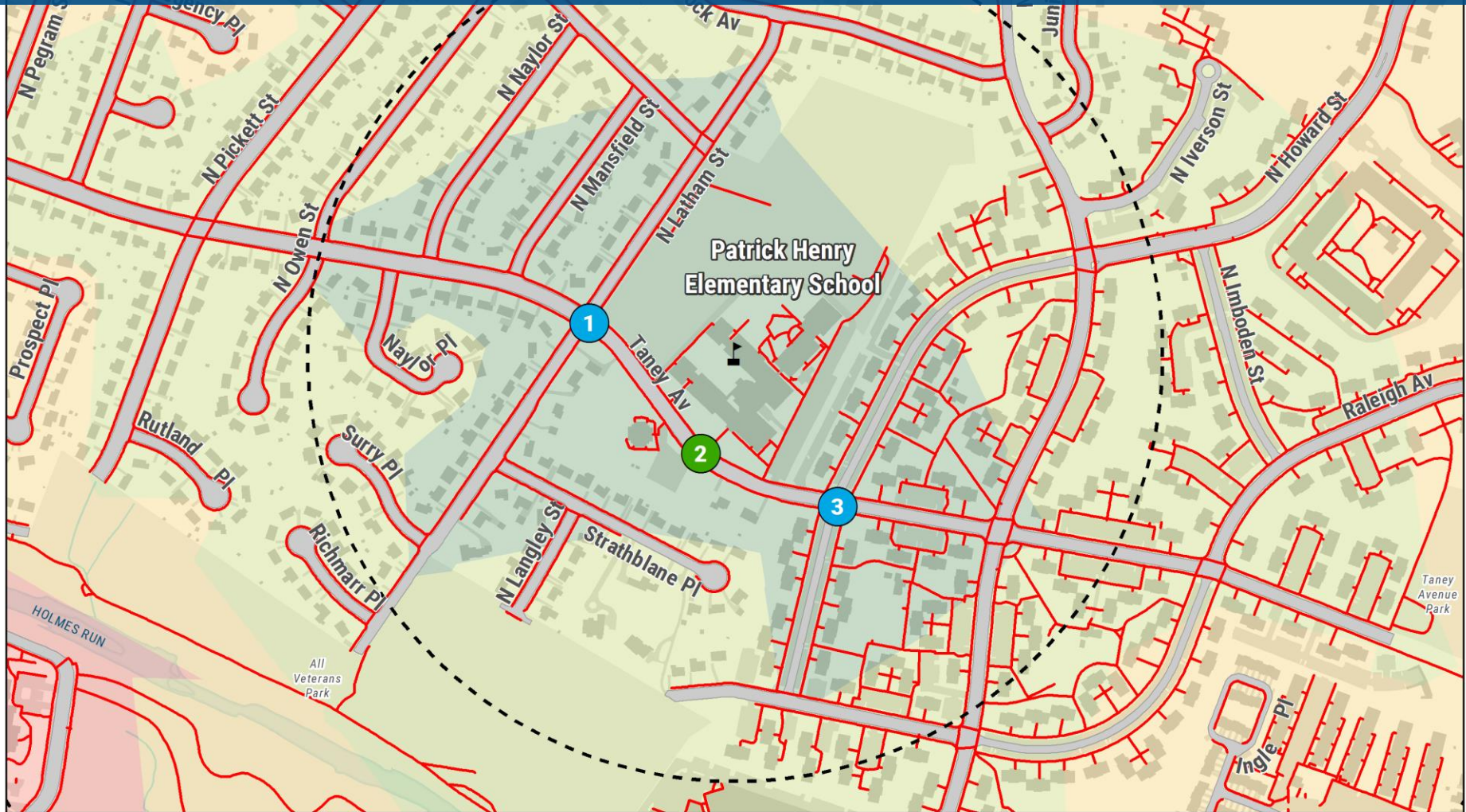
Restrict parking 20-ft. from corners to daylight intersections and increase sight lines

Stripe parking lanes on Taney Ave to visually narrow the street

Reconstruct curb ramps to meet ADA requirements

Rendering showing a striped parking lane and pavement markings restricting parking on Taney Avenue near the intersection with N Jordan Street.

SCHOOL BLOCK RECOMMENDATIONS



Infrastructure Recommendations

Patrick Henry Elementary School
 Alexandria, Virginia

- Intersection Recommendations
- Mid-Block Recommendations
- School Zone Signage Recommendations
- Signalized Intersection Recommendations
- //// Sidewalk Recommendations
- Sidewalks

- Schools
- 1/4 Mile Buffer
- Network Buffers**
- 1/4 Mile
 - 1/2 Mile
 - 1 Mile
 - 2 Miles

1 – TANEY AVE AND LATHAM ST

Map ID	Issue	Recommendation	Timeframe*
1	<p>Large curb radii enable high speed turning movements and lengthen pedestrian crossing distance</p> <p>Drivers using westbound bike lane as right turn lane</p>	Use flexposts to create curb extensions the width of the parking lane on Taney Ave	Medium

* Short = within 1 year, Medium = within 3 years, Long = 3 or more years



2 – MIDBLOCK CROSSING

Map ID	Issue	Recommendation	Timeframe*
2	Poor visibility for pedestrians at midblock crossing on Taney Ave	Use flexposts to create curb extensions the width of the parking lane on Taney Ave Add high visibility crosswalk markings	Medium (during new construction)

* Short = within 1 year, Medium = within 3 years, Long = 3 or more years



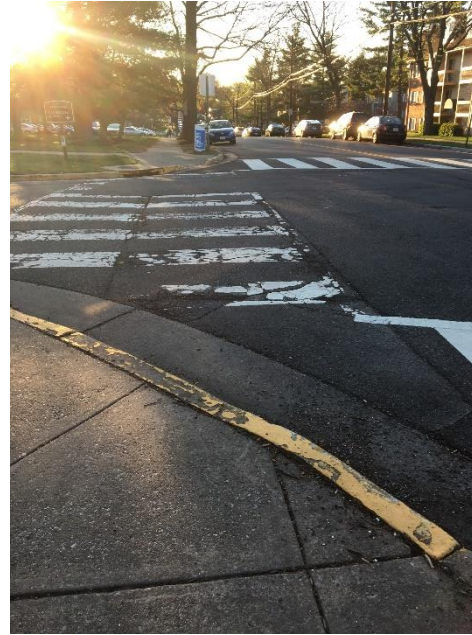
3 – TANEY AVE AND N HOWARD ST

Map ID	Issue	Recommendation	Timeframe*
3	Faded high visibility crosswalk markings	Repaint high visibility crosswalk markings	Short
	Curb ramps do not meet ADA standards	Ensure all curb ramps at the intersection meet current ADA standards	Short
	Curb ramp located just west of the intersection on the north side of Taney Ave is not aligned with the marked crosswalks at the intersection	Remove curb ramp	Medium
	Traffic on Taney Ave does not stop; northbound drivers on Howard St block crosswalk as they wait to turn left onto Taney Ave	Continue to study intersection to see if an all-way stop is warranted **	Medium
	Insufficient curb space for people walking and people waiting for the bus	Consider adding a bus shelter behind the sidewalk to provide a waiting area for WMATA and middle school bus riders and keep the sidewalk clear for pedestrians	Medium

* Short = within 1 year, Medium = within 3 years, Long = 3 or more years

** Source: MUTCD section 2B.07

3 – TANEY AVE AND N HOWARD ST

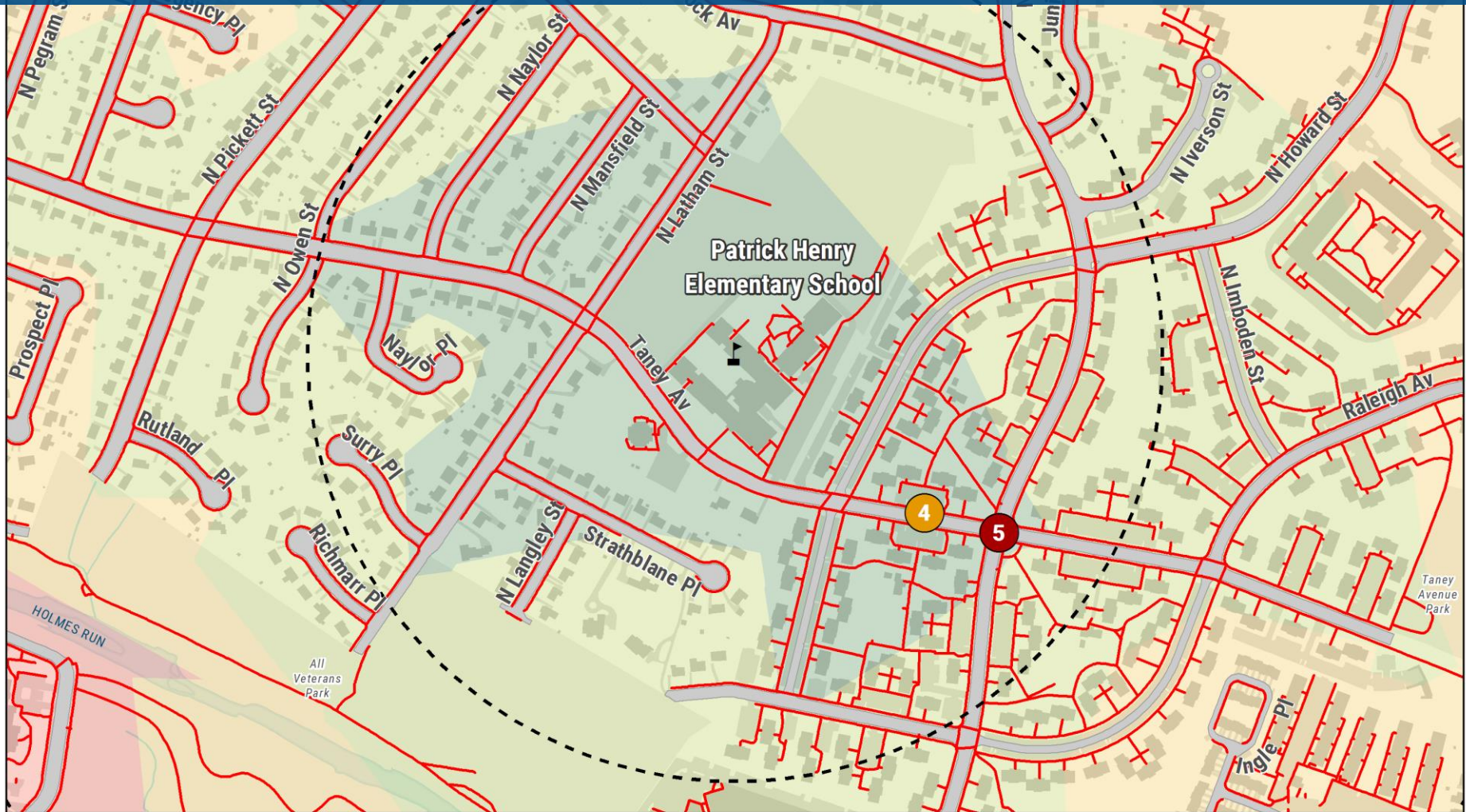


Above – The faded crosswalk markings on the north leg of the intersection should be repainted.

Left – Buses and pedestrians require more curb space at this intersection.



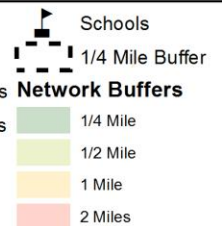
OTHER RECOMMENDATIONS



Infrastructure Recommendations

Patrick Henry Elementary School
 Alexandria, Virginia

- Intersection Recommendations
- Mid-Block Recommendations
- School Zone Signage Recommendations
- Signalized Intersection Recommendations
- //// Sidewalk Recommendations
- Sidewalks



OTHER RECOMMENDATIONS

Map ID	Issue	Recommendation	Timeframe*
4	Confusing school zone signage	Remove yellow “SCHOOL” label from 25 mph speed limit signs	Short
5	No Turn on Red restrictions are ignored	Option A – Install standard No Turn on Red (R 10-11) signs to traffic signal poles on far side of intersection	Short
		Option B - Add a dynamic 'no turn on red' sign to traffic signal poles on far side of intersection that is illuminated during arrival and dismissal	Medium
	Large curb radii accommodate high speed turning movements, lengthen the crossing distance for pedestrians and allow cars to park too close to the intersection	Reduce turning radii with curb extensions that have ADA compliant curb ramps	Medium
	Northbound drivers on Jordan St swerve around cars queuing to turn left	Restrict parking near intersection to create space for left turn lane on northbound Jordan St Conduct signal timing analysis to determine whether protected left turn phase is needed	Medium

* Short = within 1 year, Medium = within 3 years, Long = 3 or more years

TANEY AVE AND JORDAN ST



Above – The location of the No Turn on Red sign is behind where drivers stop at the intersection.

Left – Wide curb radii enable high speed turning movements and lengthen pedestrian crossing distance. The bottom image shows how curbs can be reconstructed with tighter radii.

PROGRAMMATIC RECOMMENDATIONS

EDUCATION

Recommendation	Continue Existing	Start New
Integrate pedestrian and bicycle safety education into the school curriculum.		●
Conduct a bicycle rodeo to teach the skills and precautions to ride a bike safely.		●
Incorporate information about walking and bicycling to school in communications with parents, especially during construction and prior to moving into the new school building.		●
Provide parents and guardians with safe driving information that stresses the importance of driving safely in school zones and being alert for pedestrians and bicyclists during arrival and dismissal.		●



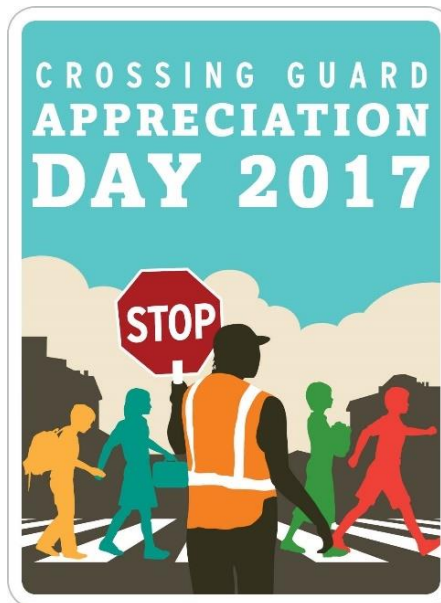
ENCOURAGEMENT

Recommendation	Continue Existing	Start New
Participate in International Walk to School Day and Bike to School Day.		●
Help organize and support walking schools buses.		●
Help organize and support bike trains.		●
Establish a frequent walker / bicyclist program.		●



ENFORCEMENT

Recommendation	Continue Existing	Start New
Establish a driver pledge program.		●
Celebrate Virginia Crossing Guard Appreciation Day.		●
Work with the police department to provide periodic parking, speed limit and 'No Turn on Red' enforcement near the school.	●	



EVALUATION

Recommendation	Continue Existing*	Start New
Conduct Student Travel Tallies to get baseline data for student travel patterns.	●	
Administer Parent Surveys to collect information on parents' attitudes towards walking and bicycling and reasons why they may or may not allow their children to walk or bike to school.	●	

**Travel Tallies were last collected in the fall of 2010 and Parent Surveys were conducted in the fall of 2014 at Patrick Henry Elementary School. Up to date information is required to monitor program success and apply for federal SRTS funding.*

